

REMARKS

Claims 9, 11-13, 37 and 40-44 are pending in the application. Claims 9, 37 and 40 have been amended. Reconsideration of this application is respectfully requested.

The Office Action rejects claims 9, 11-13 and 37 under 35 U.S.C 103(a) as unpatentable over U.S. Patent No. 6,665,036 to Oh et al., hereafter Oh, in view of U.S. Patent No. 6,111,627 to Kim et al., hereafter Kim, U.S. Patent No. 5,995,186 to Hiroshi, hereafter Hiroshi, and U.S. Patent No. 6,061,114 to Callegari et al., hereafter Callegari.

Since the Examiner only discusses claims 9 and 37, it is assumed that claims 11-13 were inadvertently included in the rejection.

This rejection is respectfully traversed. Claims 9 and 37 have been amended to recite:

“wherein each of said first dry deposited layer and said second dry deposited layer is divided into a plurality of pixels each having a boundary and at least two domains; wherein said domains are aligned by a method selected from the group consisting of: mechanical mask, photo-resist, UV treatment, and ridge and fringe field methods;

wherein said dry deposited layers are exposed to at least a first particle beam treatment and a second particle beam treatment to selectively align said domains in first and second directions, respectively;

wherein a direction of said first particle beam treatment with respect to said dry deposited layers is different than a direction of said second particle beam treatment with respect to said dry deposited layers”.

Support for the amendment is found in at least Figs. 1-9 and 14 of the drawing and the accompanying description. Note in particular, pages 13-17 of the specification.

The Examiner has conceded that the combination of Oh, Kim and Horishi does not disclose or teach the same paragraphs of independent claims 9 and 37 before amendment. The Examiner contends that Callegari discloses this deficiency of the combination of Oh, Kim and Horishi.

Callegari does not disclose or teach that the domains of the pixels are aligned by any of the recited methods, “wherein said dry deposited layers are exposed to at least a first particle beam treatment and a second particle beam treatment to selectively align said domains in first and second directions, respectively;” and “wherein a direction of said first particle beam treatment with respect to said dry deposited layers is different than a direction of said second particle beam treatment with respect to said dry deposited layers”.

The Examiner contends that the recited first and second beam treatments read on two particles of Calligari’s beam. However, Calligari does not disclose or teach that two particles of his beam “selectively align the domains of a pixel in first and second directions” as recited in amended independent claims 9 and 37.

The Office Action provides no motivation for one skilled in the art combine Oh with Kim, Hiroshi and Callegari. In fact this suggested combination is improperly based on the hindsight of Applicants’ disclosure. Such hindsight reconstruction of the art cannot be the basis of a rejection under 35 U.S.C. 103. The prior art itself must suggest that modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 USPQ 2d 1397, 1398-1399 (CAFC, 1989). “The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made.” Sensonics Inc. v. Aerosonic Corp. 38 USPQ 2d 1551, 1554 (CAFC, 1996), citing Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 1138, 227 USPQ 543, 547 (CAFC, 1985).

For the reason set forth above, it is submitted that the rejection of claims 9, 11-13 and 37 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

The Office Action rejects claims 9, 11-13, 41 and 43 under 35 U.S.C 103(a) as unpatentable over Oh, in view of Kim, Hiroshi, Callegari and Japanese Patent Publication No. 08-101390 to Masaaki et al., hereafter Masaaki.

As noted above, amended independent claims 9 and 37 are unobvious in view of the combination of Oh, Kim, Horishi and Callegari. The Examiner contends that Masaaki supplies the deficiency of the combination of Oh, Kim, Horishi and Callegari. The Examiner has supplied an English translation of only the abstract of Masaaki. Based on this abstract, Masaaki does not supply the deficiency of the combination of Oh, Kim, Horishi and Callegari. Masaaki describes regions of the two substrates that face one another and have different orienting directions. This information is inadequate for the rejection.

If the Examiner maintains the rejection, it is respectfully requested that an English translation of Masaaki be supplied to Applicants and that any such rejection be non-final.

The Office Action provides no motivation for one skilled in the art combine Oh with Kim, Hiroshi, Callegari and Masaaki. In fact this suggested combination is improperly based on the hindsight of Applicants' disclosure. Such hindsight reconstruction of the art cannot be the basis of a rejection under 35 U.S.C. 103. The prior art itself must suggest that modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 USPQ 2d 1397, 1398-1399 (CAFC, 1989). "The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made." Sensonic Inc. v. Aerosonic Corp. 38 USPQ 2d 1551, 1554 (CAFC, 1996), citing Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 1138, 227 USPQ 543, 547 (CAFC, 1985).

For the reason set forth above, it is submitted that the rejection of claims 9, 11-13, 41 and 43 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

The Office Action rejects claims 40-44 under 35 U.S.C 103(a) as unpatentable over Oh, in view of Kim, Hiroshi and Callegari as applied to claims 9, 11-3, 37 and 40 and further in view of U.S. Patent No. 6,124,914 to Chaudhari et al., hereafter Chaudhari.

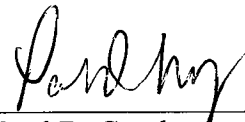
This rejection is obviated by the amendment to independent claims 9 and 37 from which claims 40-44 depend. As noted in the discussion of amended independent claims 9 and 37, the combination of Oh, Kim, Hiroshi and Callegari lacks the above quoted passage of these independent claims. Chaudhari, which was cited for a different reason, does not supply this deficiency.

For the reason set forth above, it is submitted that the rejection of claims 40-44 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

It is respectfully requested for the reasons set forth above that the rejections under 35 U.S.C. 103(a) be withdrawn, that claims 9, 11-13, 37 and 40-44 be allowed and that this application be passed to issue.

Respectfully Submitted,

Date: 3/7/08



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